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Talented and average intelligent children's levels of using emotional intelligence

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Abstract

In this research, we investigated the differentiation of emotional intelligence's sub-scales in highly and average intelligent individuals. The Prevalence of Using Emotional Intelligence in Students Scale was applied to 128 students, 57 were gifted students chosen from Izmir Bilim ve Sanat Merkezi (İzmir Art and Science Institution), and 71 were 4th and 7th grade students of National Education Primary Schools. In the light of the findings, it was seen that all participants had high scores in sub-scales of emotional intelligence. In the self-consciousness, managing emotions, and motivating emotions sub-scales, significant differences was found between the groups. There was no difference between the groups in terms of empathy and social skills.

Keywords: Gifted; Art and Science Institution; emotional intelligence; regulation of emotions; empathy.

1. Introduction

Emotions play an important role while the daily activity of our mind is being organized as well as being important for our behaviors and decisions (Ulutaş and Ömeroğlu, 2007). Intelligence and mental skills contribute to learning and adaptation. The only way of researching these complicated processes, which form mental abilities, is to observe and examine the individuals when they are using those skills. Recent studies show that researchers have not reached an agreement on "intelligence". They dwell on practical intelligence as a key factor rather than social factor (Morris, 2002). Subsequent studies showed that creative ability and adaptation to the environment are also regarded as a component of intelligence by researchers (Snyderman and Rothman 1987; Morgan, 1981; Penaloza, 2009).

In the last 20 years, the most outstanding theory that has been developed is Gardner's multiple intelligence theory (Gardner et al., 1997). According to Gardner (1993) there are the following seven types of intelligence: Logic-

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mathematical intelligence, linguistic intelligence, spatial intelligence, musical intelligence, bodily and kinesthetic intelligence, interpersonal intelligence and intrapersonal intelligence (Gardner, 1993; Vural, 2005; Saban, 2005).

In the late 1990's, Goleman suggested the concept of "Emotional Intelligence (EI)" against various theories, which considers that intelligence can be categorized. Goleman's emotional intelligence view is based on the thesis that even "the most intelligent individual can defeated by his or her strong emotions; therefore, people, who have higher IQ, can fail in their practical life" (Goleman, 1995). According to Goleman (1995), the emotional intelligence includes traits such as abilities for motivating the individual, providing endurance against obstacles, controlling reactions and delaying satisfaction, regulating the mood that blocks thought ability and avoiding stress, empathy, and being hopeful. After Goleman's work various studies were conducted on classifying emotional abilities (Salovey and Mayers de, 1990).

Essentially, Intelligence Quotient (IQ) and Emotional Quotient are not contrary; they are separate competences (Titrek, 2005). Goleman (1995) defines EQ as another sort of being clever. According to Goleman, EQ is not an alternative for IQ but an addition. Despite stereotyped beliefs, there are not many people whose Intelligence Quotients are high and Emotional Quotients are low or vice versa. There are a few relationships between IQ and EQ (Gardner, 1995; Erkuş, 1998).

On the other hand, another group who are commonly confused with having a high Intelligence Quotient are the gifted groups. A gifted or an intellectually endowed child shows a higher performance than his/her peers in terms of special academic fields or intelligence, creativity, art and leadership capacity and needs the type of support to develop their skills that schools usually cannot provide (MEB, n.d.; Renzuli, 1986; MEB, 1991). In Turkey, Art and Science Institutions (BILSEM) are leading institutions where talented children can be assessed. These institutions are independent education establishments, created for gifted or talented children that attend primary and secondary schools to become be aware of their abilities and develop their abilities, ideally without disturbing their education (MEB, n.d.). A student, who is directed to Art and Science Institutions after observations by their teachers and with their parents consent will be given to intelligence and ability tests. Children with Intelligence Quotients over 130 and skilled in fields such as music or painting are educated in parallel with the national education curriculum.

The aim of this research is to investigate whether there are significant differences between the emotional intelligence levels and intellectually endowment of children in late childhood. The research questions to be addressed are;

1. Is there any difference between not being intellectually endowed and self-consciousness, managing the emotions, empathy, and social skills sub-scales of emotional intelligence?
2. Is there any significant relationship between the sub-scales of emotional intelligence scales?

2. Method

2.1. Participants

The population of this study consisted of 128 students in the fourth and seventh grade of primary education in schools administered by the National Education Ministry. 18.8% of the students attended 4th grade, 15.6% were in 5th grade, 45.3% in 6th grade, and 0.3% attended 7th grade Fifty-seven (44.5%) were gifted students chosen from Izmir Bilim and Sanat Merkezi (İzmir Art and Science Institution), seventy-one had an average Intelligence Quotient (55.5%). Sixty-one students were female (47.7%) and sixty-seven students were male (52.3) All the students have average socio-economic levels.

1. 2. Data gathering tools

1. 2. 1. The prevalence of using emotional intelligence scales for students

The Scale was developed and its validity and reliability were verified by Titrek (2005). It is a five likert-type scale and consisting of 5 sub-scales and 7 questions. Each dimension in emotional intelligence scale (self-

consciousness, managing emotions, motivating emotions, empathy, and social skills) was arranged as a sub-scale (Titrek, 2007). Self-consciousness, managing emotions, motivating emotions sub-scales were discussed under personal competence heading, empathy and social skills sub-scales were discussed under social competence heading.

1. 2. 2. Goodenough-Harris Draw-a-man test

The test developed by Goodenough and Harris (1950) aims to measure the mental development of individuals from 4 and 14 years old (Özgüven, 2007). It was adapted into Turkish by Uçman (1972). The child is asked to draw a man. It was seen that the norm study of Turkish version is consistent with the original values, to determine the structure validity analysis of variance have been estimating. The differences in the drawings according to age, gender, and socioeconomic status were found to be at the .05 level (Öner, 1997). In his study, Özgüven found a nearly 0.70 correlation between the Goodenough-Harris scores and the Stanford-Binet scores (Özgüven, 2007).

1. 3. Operation

The students in the gifted group were selected from 57 students attending BILSEM (Bilim Sanat Merkezi) according to age groups 10-13 age groups) Students that are accepted for BILSEM have to pass an assessment and evaluation (MEB, n.d.). The mean IQ of these students was 140.4. To select the average students, Goodenough Draw-A-Man test was administered to a group of students attending a primary school in Aksaray city. We selected 71 students (average IQ=90-110), and made sure none of them have an endowment. The mean IQ of those students was found to be 103.7. The students were briefly informed about the aim of the study. The emotional intelligence scale was applied to the students in groups. The results obtained were transferred to a computer into the SPSS 11.5 for Windows program and evaluated with an analysis of variance, correlation, and t test.

3. Findings

First, the mean and standard deviation of emotional intelligence results obtained from all the participant children, were calculated (Table 2).

Table 1. The distribution over the whole sample of the mean and standard deviation results of the emotional intelligence sub scales.

Sub-scales	Mean	Standard deviation	N
Self-Consciousness	51.62	5.93	128
Managing emotions	64.47	7.26	128
Motivating emotions	60.40	8.05	128
Empathy	52.66	5.60	128
Social Skills	82.34	9.13	128

From the average scores of emotional intelligence scale obtained from the sample, it can be understood that, the students perceive themselves significantly satisfactory in all the emotional intelligence dimensions; furthermore, the students consider themselves the most competent in social skills dimension of emotional intelligence.

Table 2 presents the t test results of the emotional intelligence scale scores of highly intelligent students and average intelligent student groups in terms of the sub-scales.

Table 2. T test results of the differentiation of emotional intelligence sub-scales in highly and average intelligent students.

Dimensions	Groups	n	Mean	Standard Error	t	p
Managing emotions	Gifted	57	65.52	5.94	5.190	.024*
	Average intelligence	71	63.63	8.11		
Motivating emotions	Gifted	57	61.19	6.22	6.587	.011*
	Average intelligence	71	59.75	9.28		
Empathy	Gifted	57	52.63	4.78	2.188	.142
	Average intelligence	71	52.69	6.22		
Social Skills	Gifted	57	82.59	8.73	.025	.874
	Average intelligence	71	82.14	9.49		
Self-Consciousness	Gifted	57	52.36	4.79	5.861	.017*
	Average intelligence	71	51.02	6.69		

*p<0.05

From Table 2 it can be seen that, in the self-consciousness, managing emotions, and motivating emotions sub-dimensions of emotional intelligence, while scores of highly intelligent students are 52.36, 65.52, and 61.19, those of average intelligent students are 51.02, 63.63, and 59.75 respectively. The t value, which was calculated in order to test the significance of the difference between the mean scores of the groups, was found (t=5.861, p<.05) for the self-consciousness sub-scale, (t=5.190, p<.05) for the managing emotions sub-scale, and (t=6.587, p<.05) for the motivating emotions sub-scale. Therefore, there is a significant difference between the groups at .05 level.

The Pearson Product Moment Test was used to assess the level of the relationship between the scores that students obtained from the emotional scale's sub-scales. The related findings are presented in Table 3.

Table 3. Correlation analysis results of sub-scales of emotional intelligence in students (N=128)

Sub-scales		Managing emotions	Motivating emotions	Empathy	Social Competence	Self-Consciousness
Managing emotions	r	1				
Motivating emotions	r	.869 **	1			
Empathy	r	.697 **	.749 **	1		
Social Skills	r	.731 **	.723 **	.736 **	1	
Self-Consciousness	r	.782 **	.741 **	.589 **	.617 **	1

** p<0.01

It can be observed in Table 3 that, there is a significant relationship between the sub dimensions of emotional intelligence sub-dimensions (P<0.01). In accordance with this finding, an increase in any sub-dimension of emotional intelligence scale directly contributes to an increase in other dimensions.

4. Discussion

It can be seen that, students perceive themselves considerably satisfactory in the sub-dimensions of the emotional intelligence scale. In the sample most students have working, university-graduate, and non-split families. The fact that their socioeconomic level is high affects emotional intelligence variable positively. Zeidner et al. (2003) asserted that variables such as being in a good environment for social development, and family factors can create outstanding increases in emotional intelligence scores.

It was found that, there was a significant difference between the scores of the highly and average intelligent students in the three sub-scales of emotional intelligence scale. In self-consciousness, managing emotions, and motivating emotions subscales, highly intelligent students have more EI and difference between them is significant. Goleman (1998) suggested examining these sub-dimensions under the headline of personal competencies. In terms of personal competency, high scores obtained from those sub-scales means openness to problem solving and high awareness (Titrek, 2007). To achieve this, high IQ becomes supportive factor (Matthews, 2004).

The correlation between the sub-scales of emotional intelligence was found to be significant at .00. This finding is consistent with emotional intelligence dimensions of lecturers in Titrek's (2007) study (.01). At this stage, a positive intervention to any sub-dimension will be so strong as to affect other sub-dimensions.

As a conclusion it can be said that, to manage the emotions intelligently especially in terms of the self-consciousness, managing emotions, and motivating emotions sub-dimensions. If we discuss emotional intelligence sub-scales that involve personal competencies, being talented creates a significant difference. However, when empathy and social skills that are social competencies sub-scales of emotional intelligence are discussed, besides being talented, effects of other factors should be considered.

Studying with the students in the late childhood period may have limited this research, in which emotional intelligence variable and being talented. To carry out research on adults could provide an answer to the question "Is it possible to manage emotions cleverly" in other development fields.

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